

enhance performance of an optical device. However, this is contrary to the disclosure of Wheeler. Wheeler discloses a laser diode which, like every laser diode, has a greater divergence in the fast axis than the slow axis. Wheeler clearly states at column 6, lines 30-42, that this anamorphic quality of a laser diode is undesirable, as is the astigmatic quality of laser diodes. While laser diodes are small and cheap, they are not a good source of laser radiation and cannot be normally used to replace a gas laser or Nd:YAG laser.

In view of the admitted undesirable qualities of a laser diode, Wheeler discloses use of a single mode fiber, which attenuates all laser modes other than the circularly symmetric Gaussian mode. This attenuation reduces the intensity of the laser diode beam as Wheeler admits at column 5, lines 56-60, further making a laser diode an unsuitable replacement for a gas or Nd:YAG laser. If one were to use a multi-mode laser diode bar with a single mode fiber with the invention, the intensity would be much less than 1 percent after emerging from the fiber. There is no reason one of ordinary skill in the art would replace the laser source of Kowarz with a laser diode having a single mode fiber.

Wheeler enhances the contrast between the "on" and "off" state of the laser diode to great a large number of uniform black pixels in a short amount of time. The single mode fiber achieves the high contrast and high imaging rate for such applications as the fabrication of printed circuit boards (Col. 1, line 29). On the other hand, Kowarz enhances the gray levels of each pixel by modulating two different partial beams with gratings. Uniform light illuminates the gratings to display high quality motion images such as a digital cinema system (see paragraphs [0002] and [0005]. The systems of Kowarz and Wheeler are very dissimilar and

one would not combine the teachings of Wheeler with the system of Kowarz.

Assuming *arguendo* the laser source of Kowarz was replaced by a laser diode with a single mode fiber, the resulting device does not meet the invention as recited in claim 1. Claim 1 recites a laser beam with different divergences in the fast axis and slow axis separated into two component beams. The laser diode with the single mode fiber of Wheeler does not have a different divergence in fast and slow axis and is not separated into two component beams. This is due to a fundamental difference between Wheeler and the invention.

Wheeler emphasizes that the anamorphic characteristics of the diode laser must be eliminated, whereas, the invention makes use of the different divergence in the fast and slow axis. The greater divergence in the fast axis is accompanied by a greater coherence in the fast axis, the greater coherence leading to a modulation with a higher resolution. Rather than try to eliminate the different divergences, the invention uses this feature to enhance the performance of the optical device. This enhancement is not realized by Kowarz or Wheeler and neither discloses separation of the beam into component beams. The deficiencies of Kowarz and Wheeler et al. are not cured by any of the other prior art of record.

Reconsideration and withdrawal of the rejection is respectfully requested. If any issues remain and the Examiner believes a telephone conversation would resolve such issues, the Examiner is urged to contact the undersigned attorney.

If any fees are due and owing, the Commissioner is authorized to charge Deposit Account No. 08-2455.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Christopher J. McDonald", written over a horizontal line.

Christopher J. McDonald  
Reg. No. 41,533

March 20, 2007

HOFFMAN, WASSON & GITLER, P.C.  
2461 South Clark Street  
Suite 522  
Arlington, Virginia 22202  
703.415.0100

**Attorney's Docket: A-9211.RFR/bh**